AMENDMENTS TO THE CLAIMS

Docket No.: 21064/0206820-US0

1-11. (Canceled)

12. (Currently Amended) A longitudinal granular oxide recording medium, comprising:

(a) at least one non-magnetic layer with body-centered cubic atomic structure with a (200)

preferred growth orientation,

(b) at least one interlayer with hexagonal close packed atomic structure and with a (11-20)

preferred growth orientation,

(c) at least one magnetic oxide-containing granular magnetic layer with hexagonal close

wherein the interlayer comprises at least two layers: a first interlayer, IL1, located above first

packed atomic structure and with a (11-20) preferred growth orientation,

layer (a) and comprising a Co-X alloy, wherein X is selected from the group consisting of Cr. Pt.

Ta, B, W, Mo, Ru, Si, Cu, Ag, Ge, Nb, Fe, Ni, Au and combinations thereof, and a second

interlayer, IL2, comprising a Ru-Y alloy, wherein Y is selected from the group consisting of Rh, Ir,

Cr, Re, Co, V, W, Ta, Zr, Hf, Ti, Mo, Au and combinations thereof.

13-14 (Canceled)

15. (Currently Amended) The longitudinal granular oxide recording medium of claim

[[14]] 12, wherein the first interlayer comprises at least 50 at. % of Co and the second interlayer

comprises at least 50 at. % of Ru.

Docket No.: 21064/0206820-US0

16. (Original) The longitudinal granular oxide recording medium of claim 12, wherein the

magnetic oxide-containing granular magnetic layer comprises magnetic crystal grains that are

substantially isolated by an inter-granular region comprising a non-magnetic substance.

17. (Original) The longitudinal granular oxide recording medium of claim 16, wherein

there is substantially no diffusion of the non-magnetic substance from the magnetic crystal grains to

the inter-granular region.

18. (Original) The longitudinal granular oxide recording medium of claim 12. further

comprising a substrate having a textured surface and the magnetic oxide-containing granular

magnetic layer has an OR-Mrt of greater than 1.0.

19. (Original) The longitudinal granular oxide recording medium of claim 12, wherein a

full-width at half-maximum of a rocking curve of the magnetic oxide-containing granular magnetic

layer in a [11-20] direction is less than 10°.

(Original) The longitudinal granular oxide recording medium of claim 12, wherein a

full-width at half-maximum of a rocking curve of the magnetic oxide-containing granular magnetic

layer in a [11-20] direction is less than 7° and the magnetic oxide-containing granular magnetic

layer has an OR-Mrt of greater than 1.4.

Reply to Office Action of January 22, 2007

21-22. (Canceled)

23. (New) A granular oxide recording medium, comprising:

(a) at least one non-magnetic layer with body-centered cubic atomic structure with a \(200 \)

Docket No.: 21064/0206820-US0

preferred growth orientation,

(b) a first interlayer, IL1, comprising a Co-containing alloy,

(c) a second interlayer, IL2, comprising Ru or a Ru-containing alloy with hexagonal close

packed atomic structure and with a (11-20) preferred growth orientation, and

(d) at least one magnetic oxide-containing granular magnetic layer with hexagonal close

packed atomic structure and with a (11-20) preferred growth orientation.

24. (New) The granular oxide recording medium of claim 23, wherein the first interlayer

comprises at least 50 at. % of Co and the second interlayer comprises at least 50 at. % of Ru.

25. (New) The granular oxide recording medium of claim 23, wherein a full-width at half-

maximum of a rocking curve of the magnetic oxide-containing granular magnetic layer in a [11-20]

direction is less than 10°.

26. (New) The longitudinal granular oxide recording medium of claim 12, wherein the

interlayer further comprises a third layer comprising Ru or Ru alloy in between the first and second

interlayers.

Application No. 10/829.164

Response to Notice of Non-Compliant Amendment dated June 29, 2007

Reply to Office Action of January 22, 2007

27. (New) The granular oxide recording medium of claim 23, wherein the interlayer further

Docket No.: 21064/0206820-US0

comprises a third layer comprising Ru or Ru alloy in between the first and second interlayers.

28. (New) The longitudinal granular oxide recording medium of claim 12, wherein the

interlayer further comprises a third layer comprising Ru or Ru alloy in between the first and second

interlayers.

29. (New) A granular oxide recording medium, comprising:

(a) a first interlayer, IL1, comprising a Co-containing alloy,

(b) a second interlayer, IL₂, comprising Co, a Co-containing alloy, Ru or Ru-containing

alloy with hexagonal close packed atomic structure and with a (11-20) preferred growth orientation,

and

(c) at least one magnetic oxide-containing granular magnetic layer with hexagonal close

packed atomic structure and with a (11-20) preferred growth orientation.

30. (New) The granular oxide recording medium of claim 29, wherein the second interlayer

IL2, comprises Ru or Ru-containing alloy.

31. (New) The granular oxide recording medium of claim 29, wherein the first interlayer

comprises at least 50 at. % of Co and the second interlayer comprises at least 50 at. % of Ru.

Application No. 10/829,164 Docket No.: 21064/0206820-US0 Response to Notice of Non-Compliant Amendment dated June 29, 2007

Reply to Office Action of January 22, 2007

32. (New) The granular oxide recording medium of claim 29, wherein a full-width at halfmaximum of a rocking curve of the magnetic oxide-containing granular magnetic layer in a [11-20]

direction is less than 10°.

33. (New) The granular oxide recording medium of claim 29, wherein the interlayer further comprises a third layer comprising Ru or Ru alloy in between the first and second interlayers.